

MINUTES OF THE
MARICOPA ASSOCIATION OF GOVERNMENTS
WATER QUALITY ADVISORY COMMITTEE MEETING

Monday, July 8, 2002
MAG Office Building
Phoenix, Arizona

MEMBERS ATTENDING

Roger Klingler, Scottsdale, Chairman	Phoenix: Robert Hollander
Avondale: Esmeralda Avila	*Surprise: Rich Williams
†Chandler: Paul Bishop for Dave Siegel	Tempe: David McNeil
*Gilbert: Lonnie Frost	Maricopa County: Dale Bodiya for John Power
Glendale: Chris Ochs	*Pinnacle West Capital: John Boyer
Goodyear: Barry Hess for Joel Wade	Salt River Project: Ray Hedrick
Mesa: William McCarthy for Bill Haney	U of A Cooperative Extension: Patrick Clay
Peoria: William Mattingly for Kevin Kadlec	Citizen Representative: Eugene Jensen

*Those members neither present nor represented by proxy.

†Participated by videoconference or telephone conference call.

OTHERS PRESENT

Carollo Engineers: George Shirley	Quintero: John Christenson
CSA Engineering: Peter Chan	Damon S. Williams Associates: Robert McCandless
HTE Incorporated: Harold Thomas	Damon S. Williams Associates: Christine Close
Maricopa Association of Governments: Brenda Geisen	David Evans Associates: Greg Barry
	Camp Dresser & McKee Incorporated: Jane Ryckman-Siegwarth

1. Call to Order

A meeting of the MAG Water Quality Advisory Committee was conducted on Monday, July 8, 2002 at 4:00 p.m. Roger Klingler, Chairman, City of Scottsdale, called the meeting to order.

2. Approval of the June 11, 2002 Meeting Minutes

The Committee reviewed the draft minutes from the June 11, 2002 meeting. Robert Hollander, City of Phoenix, requested that the minutes be corrected on page three, under agenda item four to indicate that June 2003 is the anticipated Phase I completion date for the Agua Fria Recharge Project. David McNeil, City of Tempe, requested that the minutes be corrected on page four under agenda item number five to indicate that his inquiry was in regard to whether shareholder approval had been obtained for the Salt River Project Recycled Water Assessment Study. Chris Ochs, City of Glendale,

moved and Mr. Hollander seconded, and it was unanimously carried to approve the minutes from the June 11, 2002 meeting with requested corrections.

3. Draft MAG Small Plant Review and Approval for the Proposed Quintero Wastewater Treatment Facility

Chairman Klingler indicated that agenda item three was for information, discussion, and possible recommendation of approval of the proposed Quintero Wastewater Treatment Facility as part of the MAG 208 Water Quality Management Plan. He indicated that Greg Barry, David Evans Associates, would provide a presentation on the project. Mr. Barry indicated that Peter Chan, CSA Engineering, and John Christenson, Quintero, were also present to assist with questions on the project. Mr. Barry indicated that the proposed Quintero Facility would have an ultimate capacity of 150,000 gallons per day and excess reclaimed water would be disposed of through reuse.

Mr. Barry indicated that the facility would be located within the Quintero Golf and Country Club site, approximately five miles west of Lake Pleasant Regional Park and one and a half miles north of State Route 74. He indicated that the proposed Quintero Facility would accept flow from the 800 acre planned development of housing units, condominiums, and a golf course. The nearest existing wastewater treatment facility is more than five miles from the proposed development.

Mr. Barry indicated that the Quintero Wastewater Treatment Facility would be located adjacent to the existing water treatment facility. He indicated that effluent from the wastewater treatment facility would be discharged to a pump station and blended with Central Arizona Project (CAP) water and nano-filtration concentrate, or reject water. The blended water product would be used for golf course irrigation and lakes. Effluent from the wastewater plant would be Class A+ quality, and the final blended water product would be Class B+ quality.

Chairman Klingler indicated that a copy of the Maricopa County letter of no objection on the Quintero Facility had been placed before each Committee member. He inquired whether the County's concern regarding a copy of the agreement for the City of Peoria to accept ownership of the facility had been addressed.

William Mattingly, City of Peoria, indicated that a copy of the existing draft agreement, which shows that City of Peoria would own and operate the facility, had been provided to the County earlier that day.

Dale Bodiya, Maricopa County Environmental Services Department, indicated that he concurred with Mr. Mattingly that a copy of the agreement has been provided, and the County has no objections to the proposed Quintero Facility.

Mr. Hollander requested more details about how the wastewater treatment facility effluent would be Class A+, but when blended with other water sources, the end product would be Class B+.

Mr. Barry indicated that the CAP source and nano-filtration concentrate contain higher coliform constituents and blending them with the higher quality effluent would result in a lower class final product.

Chairman Klingler inquired whether a decreased seasonal golf course demand would ever result in excess reclaimed water from the facility and require an alternative means of disposal.

Mr. Barry indicated that it would not, as most of the water used on the golf course would come from the CAP source.

Mr. Ochs moved to recommend approval of the proposed Quintero Wastewater Treatment Facility as part of the MAG 208 Water Quality Management Plan. Mr. Mattingly seconded, and it was unanimously passed by the Committee.

4. Central Arizona Salinity Study

Chairman Klingler indicated that agenda item four was for information and discussion. He indicated that Harold Thomas, HTE Incorporated, would provide a presentation on the Central Arizona Salinity Study (CASS). Mr. Thomas indicated that CASS is a coalition of water and wastewater agencies in Central Arizona with a mission to provide its members with alternatives for a quality, cost effective, sustainable water supply through cooperative efforts in salinity management. Members include the Bureau of Reclamation (BOR) and the Multi-City Subregional Operating Group (SROG).

Mr. Thomas indicated that other municipal water providers are also participating in the study. He indicated that the CASS Advisors include federal, State, and County agencies, Indian Communities, as well as industry, agriculture, and utility sectors.

Mr. Thomas indicated that initial funding for CASS has been provided by BOR and the Multi-City SROG. He indicated that the CASS structure is made up of two Project Managers, a Project Management Team, a Technical Committee, and Advisors. He indicated that the study area encompasses the Phoenix Metro area, Hassayampa area, Gila Bend, Pinal County and the Tucson Metro area.

Mr. Thomas indicated that CASS is working to determine if problems will result from rising salinity levels in Central Arizona. He indicated there has been preliminary discussion on whether increasing salinity may reduce water providers' ability to use groundwater and reclaimed water, cause permit compliance problems for water reclamation plants, and increase rate of water customer complaints.

Mr. Thomas indicated that sources of salinity include surface water supply imported by CAP and Salt River Project, naturally occurring sources in local groundwater, sources resulting from concentration by water softening and membrane treatment processes, and sources redistributed through wastewater recycling systems. He indicated that the City of Phoenix data shows a total 1,834,800 pound daily load of Total Dissolved Solids (TDS) at the 91st Avenue Wastewater Treatment Plant. Of this total, 73% is from source water, and 27% is from other sources such as commercial, domestic and industrial.

Mr. Thomas indicated that CASS is concerned that, if salinity increases are found to be a problem and no solution is implemented, it may result in greater costs for water and wastewater treatment, decreased agricultural production, and some water sources becoming unsuitable for their intended

uses. CASS goals include developing a common base of understanding on issues and options, developing a consensus plan, defining salinity problem, identifying intended uses for reuse and associated TDS guideline, and developing a master plan.

Mr. Thomas indicated that CASS is currently conducting an economic impact analysis based on a BOR model previously used by Metro Water District in California. He indicated that preliminary results show that costs rise and fall linearly with change to TDS, that most costs are in the Phoenix Metro area, and that reducing TDS by 100 milligrams per liter in sources such as CAP water can amount to a \$17 million dollar per year savings. He indicated that CASS is also developing a Salt Balance which will serve as a road map to compare the societal related costs of not reducing salinity with the costs of reducing salinity.

Ray Hedrick, Salt River Project, inquired what sort of costs are included in the \$17 million dollar figure.

Mr. Thomas indicated that, as TDS levels increase, the life of water heater units decreases. He indicated that as TDS levels increase, industries would have to pay more for treatment of water they use for manufacturing processes.

Mr. Hollander inquired whether CASS would make a recommendation as part of the effort.

Mr. Thomas indicated that CASS will define if there is a salinity problem, determine feasible options for solving the problem, and make recommendations regarding the problem. He indicated that disposal of brine, the waste product of treating water for salinity, may be a significant issue.

Mr. Bodiya inquired whether CASS has considered the fact that a large portion of effluent from the 91st Avenue Wastewater Treatment Plant goes to Palo Verde Nuclear Generating Station (PVNGS).

Mr. Thomas indicated that the PVNGS system is included in the Salt Balance, and Arizona State University is conducting research on the PVNGS retention basins with respect to evaporation and brine disposal.

Chairman Klingler inquired whether CASS has come across any thinking that salinity is not a problem.

Mr. Thomas indicated that the perspective seems to depend on where one is located and what type of operation one conducts. For City of Phoenix, salinity is becoming a concern, but City of Tucson is using mainly groundwater supplies, and does not consider salinity as a problem in their immediate future.

Chairman Klingler inquired whether there has been discussion of disposal in the ocean. Mr. Thomas indicated that, previously, BOR proposed a pipeline to the sea to transport brine, but the State viewed it as the loss of a valuable water resource and decided not to pursue it. Mr. Thomas indicated that there is a salt dome near Luke Air Force Base, and it may be an idea to do deep well injections below the dome. He indicated that the use of solar ponds has also been discussed.

5. Call to the Public

An opportunity was provided to members of the public to address the Water Quality Advisory Committee. No comments were received and the meeting was adjourned.